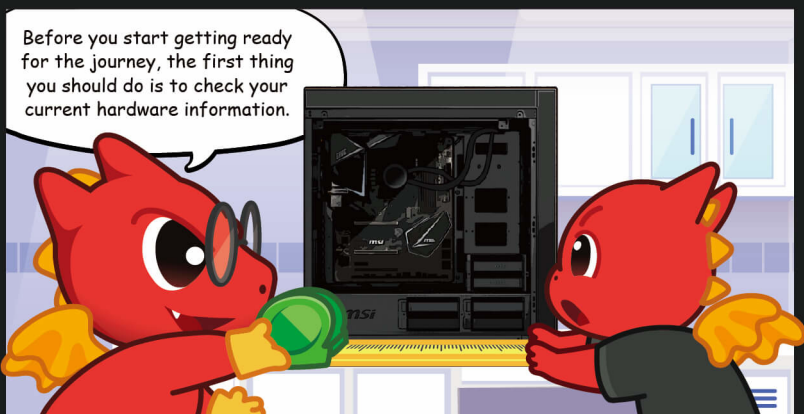
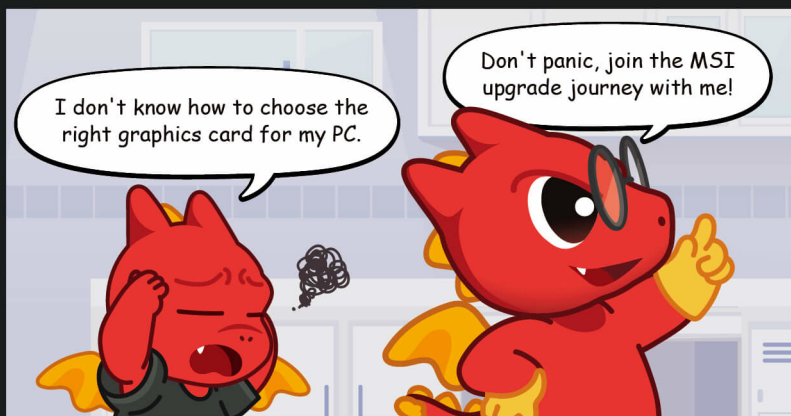


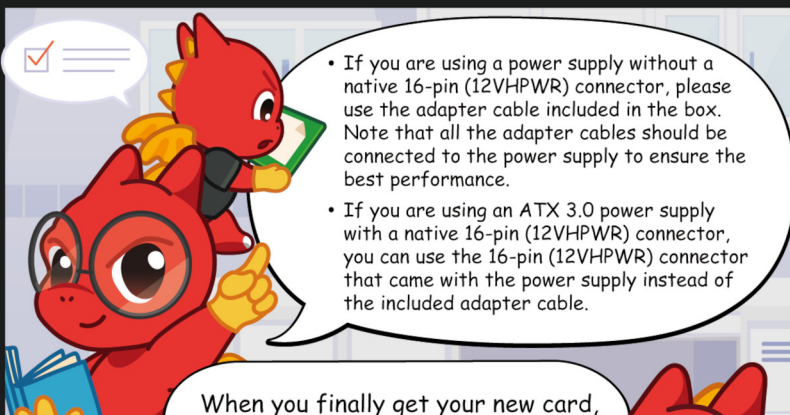
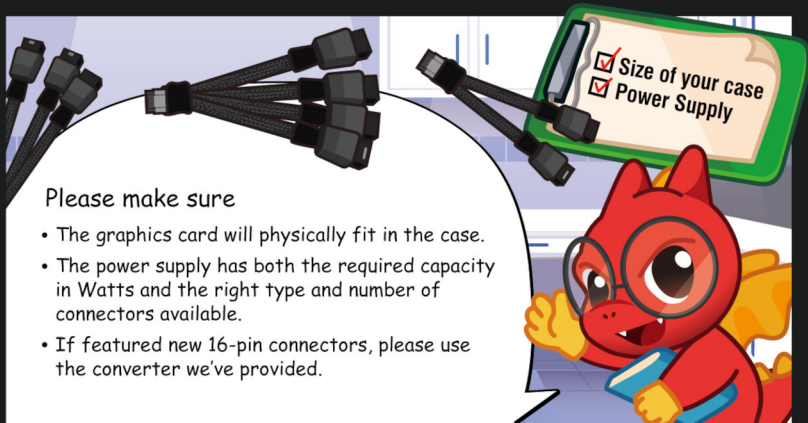


HOW TO UPGRADE YOUR PC WITH A NEW GRAPHICS CARD



- Hardware And Software Installation Guide -





PCI-E x16 Slot

Monitor with HDMI

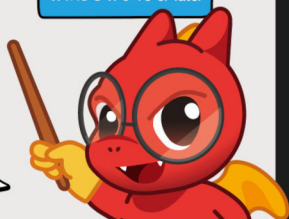
Windows
operating system



A motherboard with
at least one available



Before we start, you'll need to
check for basic compatibility.

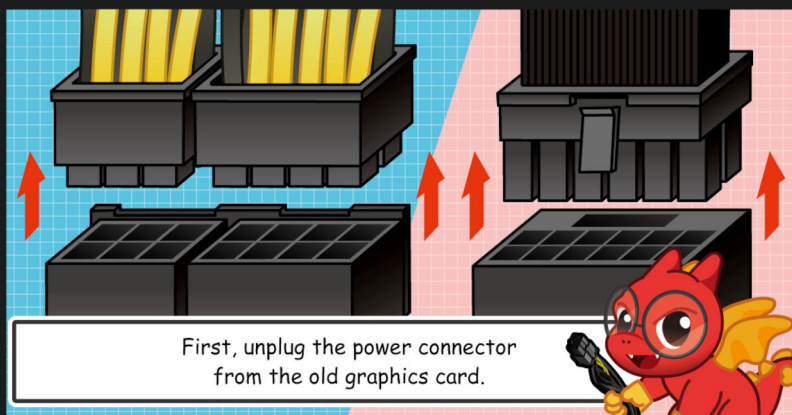


For the upgrading process,
you'll need a Phillips-head
screwdriver and a bit of time.



Be sure to **turn off your PC** and
unplug all the cables before you begin.

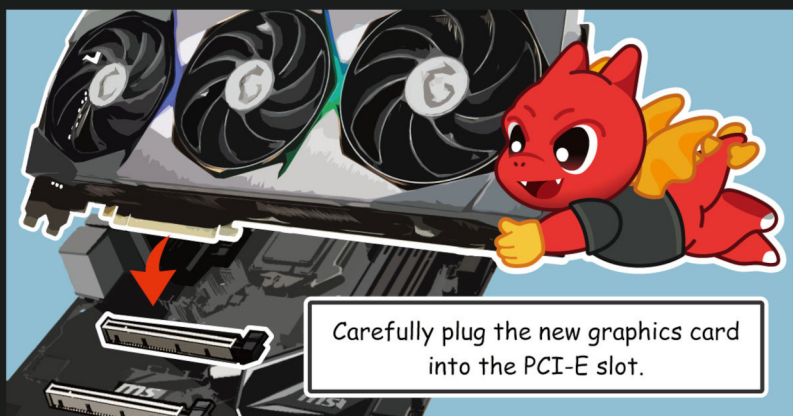
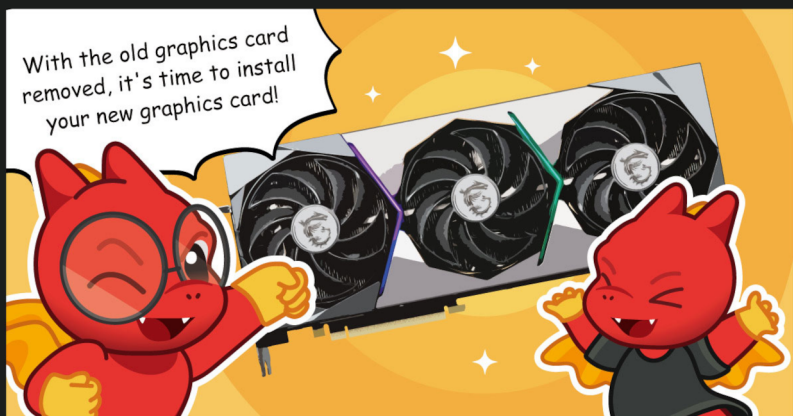




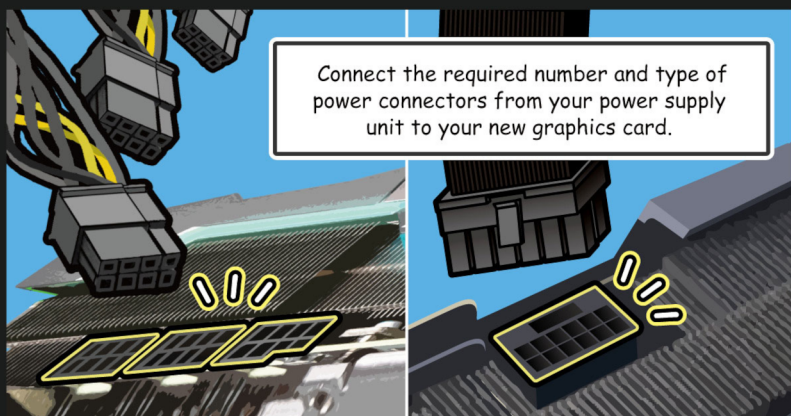
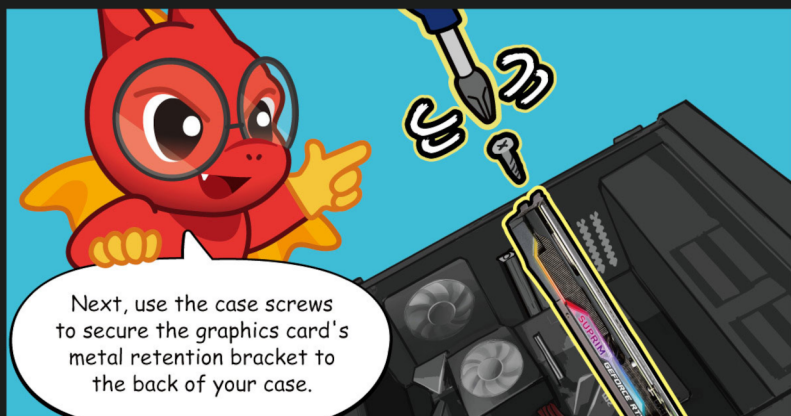
Make sure you release the small plastic latch on the end of the PCI-E slot on your motherboard to unlock your old graphics card. Now you can gently lift the old graphics card out of the case.



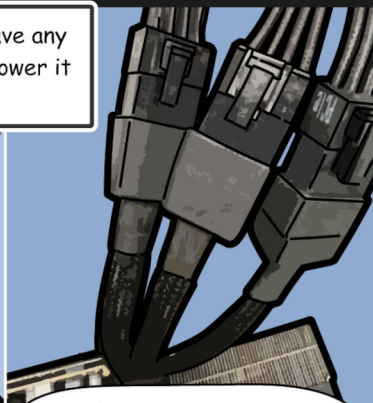
With the old graphics card removed, it's time to install your new graphics card!



Carefully plug the new graphics card into the PCI-E slot.



If your new graphics card doesn't have any power connectors, it will get all the power it needs from the motherboard.



Please pay attention to each specific display output!

DVI-D



MINI-DP



USB Type-C



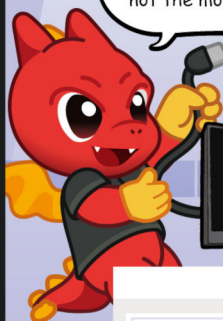
DP



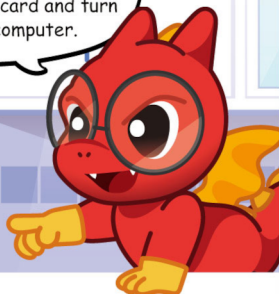
HDMI

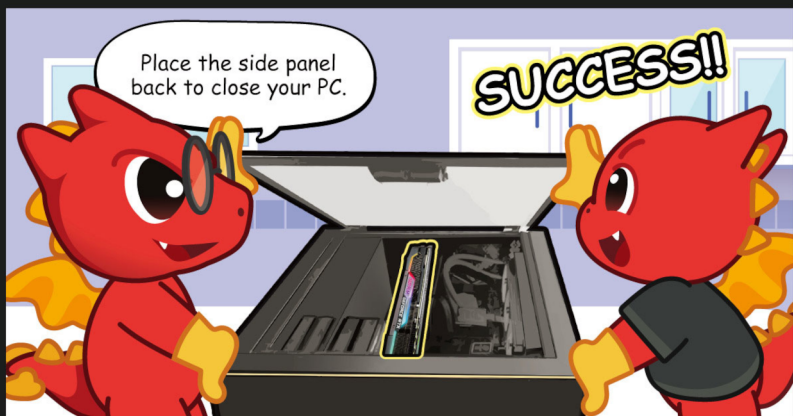
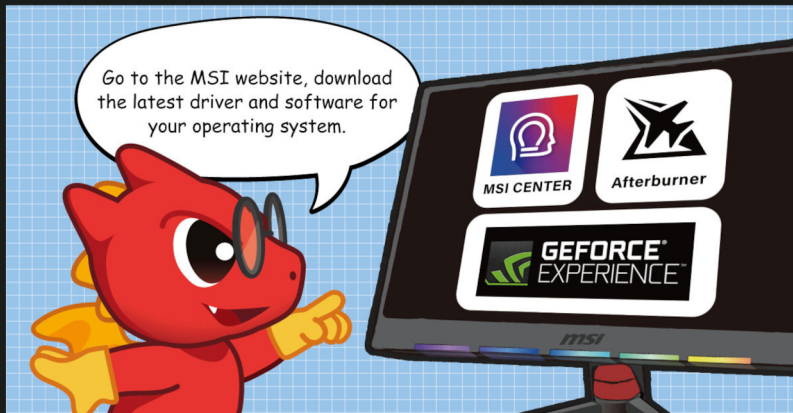


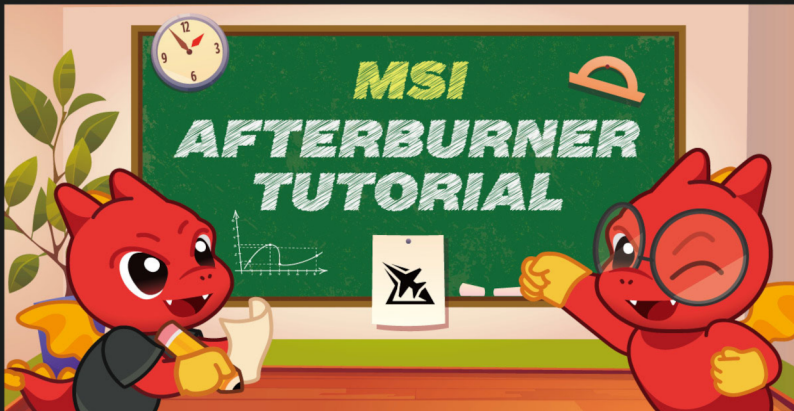
Make sure you plug it into the graphics card, not the motherboard!



Now you will have to plug your display cable into your new graphics card and turn on your computer.







Q MSI AFTERBURNER

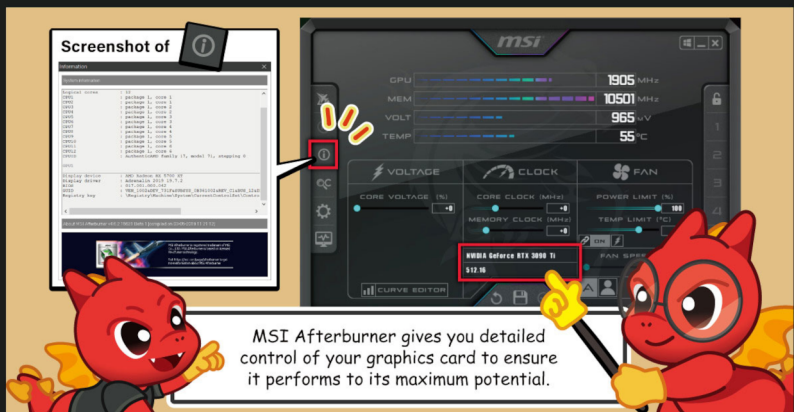


<https://www.msi.com/Landing/afterburner/graphics-cards>



DOWNLOAD 

On the MSI website, you can download and install the latest version of MSI Afterburner.



MSI Afterburner gives you detailed control of your graphics card to ensure it performs to its maximum potential.

Once the download is complete, unzip the **MSIAfterburnerSetup.zip** file and follow the installation process.



MSIAfterburnerSetup.zip

INSTALLATION PROCESS

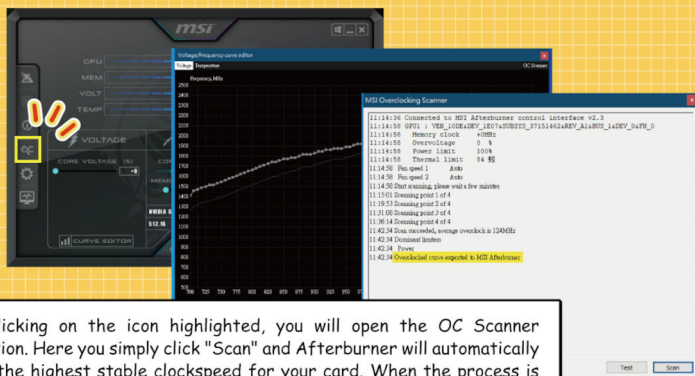
During the installation you will also be asked if you want to install RivaTuner Statistics Server, you will need this program if you want to use the On-Screen Display feature.

Before getting a free performance boost with Afterburner, let me introduce the interface and a variety of configuration options!

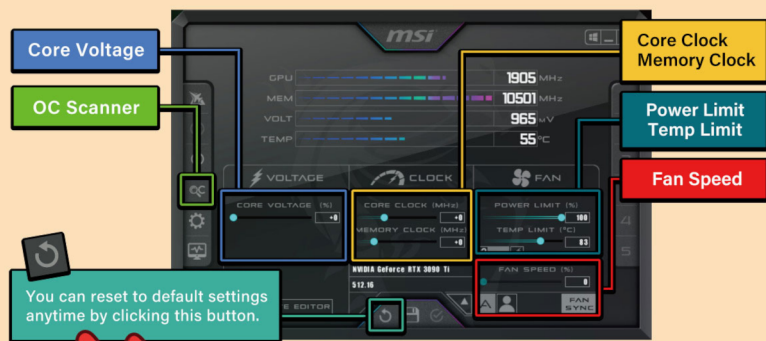


For NVIDIA graphics cards there are two ways to get more performance by overclocking. Both are totally safe by the way. The quick & easy way is called OC Scanner while the more advanced method is manual overclocking.

We'll start with the OC Scanner



By clicking on the icon highlighted, you will open the OC Scanner function. Here you simply click "Scan" and Afterburner will automatically find the highest stable clockspeed for your card. When the process is done, click Apply and your GPU is now running at a higher speed.



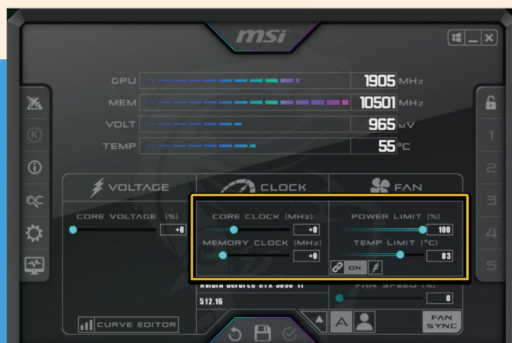
You can reset to default settings anytime by clicking this button.

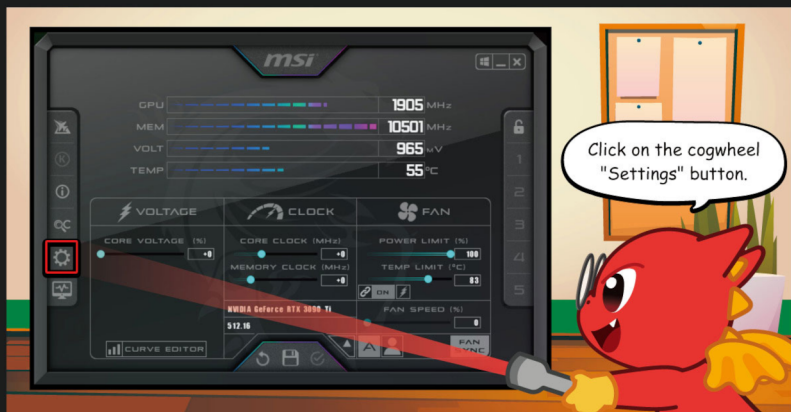
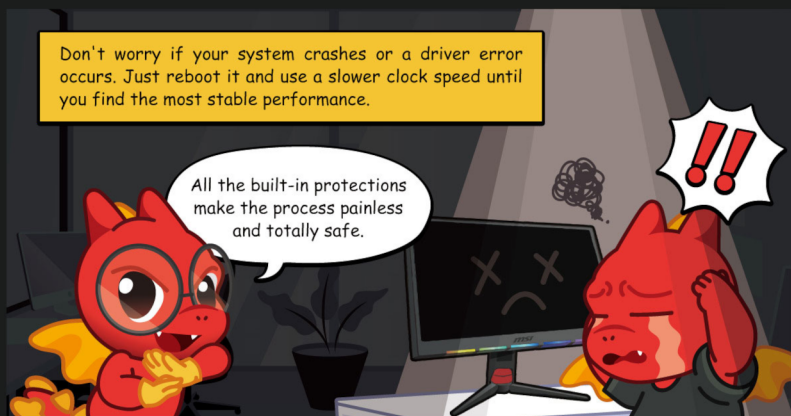
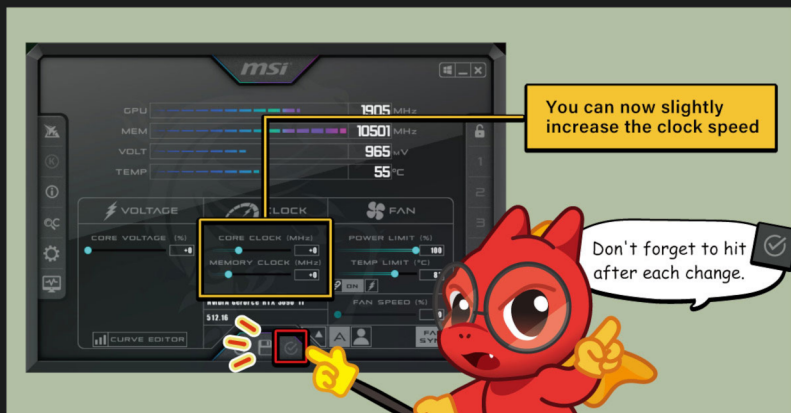
Now we'll show you the basics of manual overclocking.



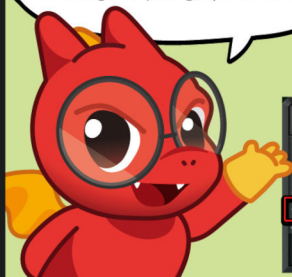
BALANCE

You can get the perfect balance between performance, temperature and ability by tweaking the clock frequency.





Under the "General" tab, click on "Unlock voltage control" and "Unlock voltage monitoring", this will allow you to increase the core voltage of your graphics card.



- ☒ Unlock voltage control
- ☒ Unlock voltage monitoring



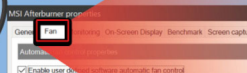
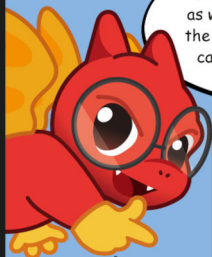
CORE VOLTAGE (%)



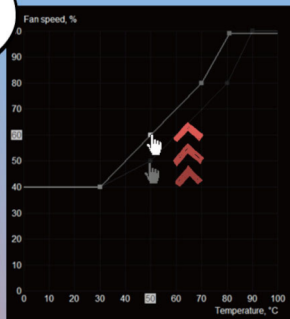
DRAW TO INCREASE THE VOLTAGE SLIGHTLY.

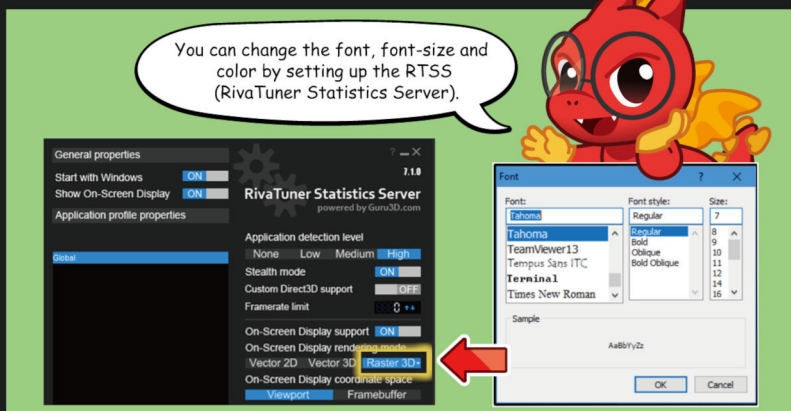
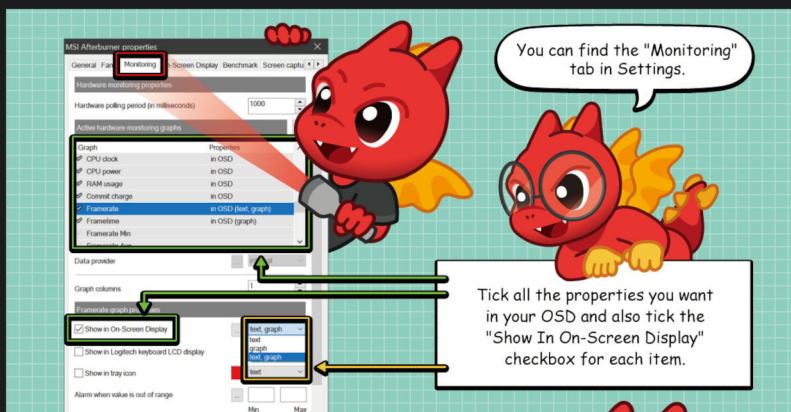
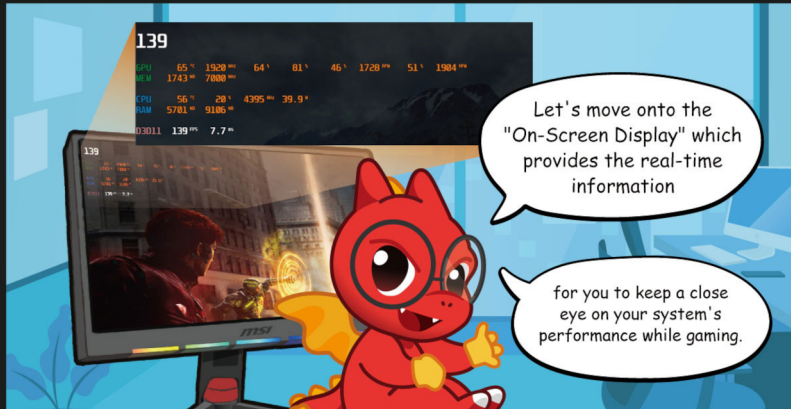


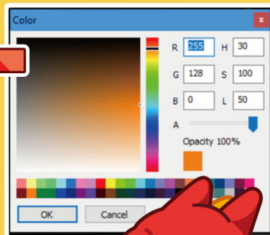
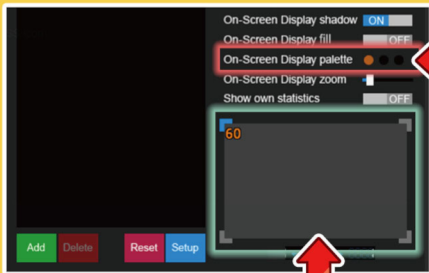
You can also modify your fan speed as well to make sure the cooling is at the optimum level when your graphics card heats up during overlocking.



Click on the "Fan" tab in cogwheel "Settings" button to get started.







You can also change the position here to adjust the vertical or horizontal height of the OSD.



msi